

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1.- 6. (Cancelled)

7. (Previously Presented) A closing cone for screwing closures onto containers, comprising:

a receiving part;

a pick ring non-rotatably coupled with said receiving part, said pick ring including a plurality of movable segments;

an actuation system that adjusts said movable segments to vary an inner diameter of said pick ring, said actuation system including a cone-taper coupling between said receiving part and at least one of said movable segments; and

a pick-up system including a spring system acting on at least one of said movable segments, said spring system selectively exerting a biasing force on said at least one movable segment in the direction of a central axis of said closing cone;

wherein said cone-taper coupling selectively squeezes together said movable segments.

8. (Previously Presented) The closing cone of claim 7 wherein said spring system is provided with at least one spring ring engaging at least one of said segments.
9. (Previously Presented) The closing cone of claim 7 wherein said pick-up system includes at least one ball that is selectively subjected to a compliant force.
10. (Previously Presented) The closing cone of claim 7 wherein said actuation system includes a resetting device.
11. (Previously Presented) The closing cone of claim 7 wherein said pick-up ring includes a device for increasing the holding power on an inner surface thereof.
12. (Previously Presented) The closing cone of claim 7 further comprising a torque transfer system.

13. (NEW) A closing cone for screwing closures onto containers, comprising:

a receiving part having an inner surface that defines a generally conical shape;

a pick ring disposed at least partially in said receiving part, said pick ring including a plurality of movable segments, each of said movable segments having a surface that defines a conical shape complementary to said inner surface of said receiving part and that establishes a cone-taper coupling between said pick ring and said receiving part;

an actuation system that at least one of adjusts said movable segments to establish a maximum an inner diameter of said pick ring and limits motion between said pick ring and said receiving part generally along a central axis of the closing cone;

a pick-up system including a spring system that establishes a biasing force on said movable segments of said pick ring toward said central axis of the closing cone, wherein said movable segments of said pick ring are operable to expand against said biasing force of said spring system to accept one of the closures; and

said pick ring operable to move relative to said receiving part generally along said central axis of the closing cone to close the cone-taper coupling and squeeze together said movable segments of said pick ring.

14. (NEW) The closing cone of claim 13 wherein said spring system includes a spring ring that engages said plurality of movable segments.

15. (NEW) The closing cone of claim 13 wherein said spring system holds at least one ball in an opening formed in at least one of said moveable segments and wherein a portion of said ball extends into said inner diameter of said pick ring.
16. (NEW) The closing cone of claim 13 wherein said actuation system includes a resetting device that moves said pick ring relative to said receiving part to open said cone-taper coupling.
17. (NEW) The closing cone of claim 13 further comprising a screw held by said receiving part, a portion of said screw extends toward one of said moveable segments and a portion of said screw is accessible from an exterior of said receiving part, wherein said screw can be selectivity adjusted to limit a degree of closure of said cone-taper coupling.
18. (NEW) The closing cone of claim 13 wherein at least one of said moveable segments includes a beveled intake portion operable to direct the closure into said pick ring.
19. (NEW) The closing cone of claim 13 further comprising a friction ring disposed between said pick ring and said receiving part and operable to exert a torque force on the closure.

20. (NEW) The closing cone of claim 13 wherein an inner surface of said pick ring includes grooves that are generally parallel to said central axis of the closing cone.